

## Unique Market Conditions Resulted in Record Returns

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Unique market conditions in 1996 led to record returns to corn production. The average corn yield improved to about 5 percent above the previous 5-year average. Despite higher yields, corn prices remained near \$3 per bushel at harvest. The combination of relatively high prices and yields pushed the value of corn at harvest to a record high of \$389 per acre. Average returns above cash costs, at \$166 per acre, were also the highest reported by USDA since tracking began in 1975. Residual returns to management and risk (\$22 per acre) were positive for the first time since 1980. Record returns to corn production in 1996, coupled with only a modest rise in costs, provided incentives for expanded acreage, but lower prices late in 1996 dampened expectations for 1997.

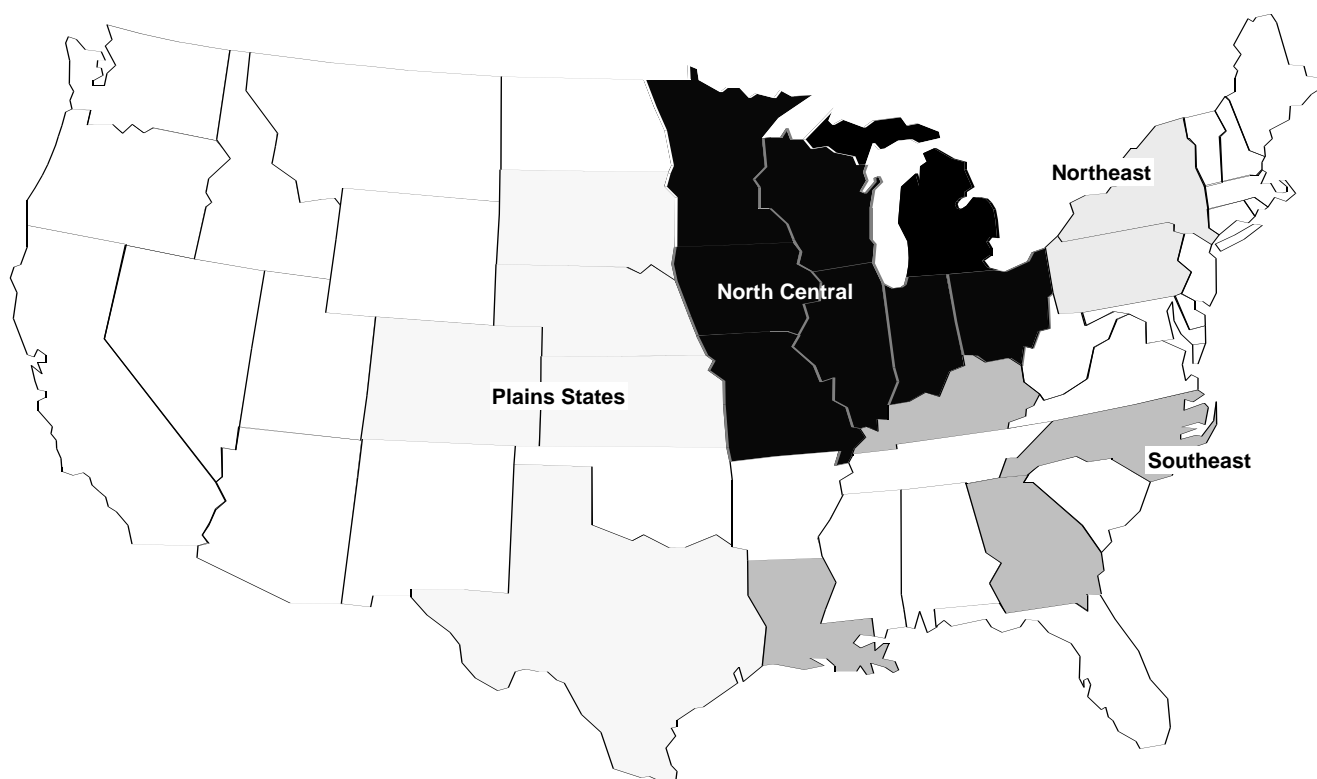
Returns to corn production in 1996 improved from 1995 in all major production regions as prices and yields were up across most of the Nation. Corn growers in the Southeast and Plains States benefited the most from better market conditions. The harvest price for corn in the Southeast was \$3.43 per bushel, up more than 50 cents from 1995, while cash costs per

bushel changed little and economic costs were only 8 cents per bushel higher. The resulting cash returns of \$168 per acre and returns above economic costs of \$37 are record highs for the Southeast since 1975. In the Plains States, the average corn yield was up about 25 bushels per acre from 1995. Cash costs increased about \$16 per acre and economic costs were \$37 higher, but per bushel costs fell about 25 cents. Cash returns in the Plains States nearly doubled and residual returns moved above \$40, also a record high.

Stronger prices and yields also improved returns in the North Central region, where most corn is grown. With the harvest price up nearly 20 cents per bushel and yields up about 10 bushels, cash returns moved above \$160 per acre, a record high, and residual returns were \$16. Costs per acre moved 8-10 percent higher in the North Central region, but higher yields left per bushel costs mostly unchanged. Price and yield conditions were not as favorable in the Northeast, where greater yields led to lower prices. Still, cash and economic returns to corn production improved as the increased value of corn more than offset a modest cost increase.

Figure 8-1

**Corn production regions**



Notes: Shading and patterns indicate production regions where producers were surveyed in 1991 about production practices and costs of production. Production regions are defined for each crop based on common cultural practices.

**Table 8-1A—Corn production cash costs and returns, excluding direct government payments, 1995-96**

Item	United States		Northeast		Southeast		North Central		Plains States	
	1995	1996	1995	1996	1995	1996	1995	1996	1995	1996
<i>Dollars per planted acre</i>										
Gross value of production (excluding direct government payments):										
Corn	321.98	388.73	231.85	252.73	306.63	385.29	318.44	370.55	346.36	453.78
Total, gross value of production	321.98	388.73	231.85	252.73	306.63	385.29	318.44	370.55	346.36	453.78
Cash expenses:										
Seed	23.98	24.06	22.56	22.59	20.24	20.96	23.80	23.76	25.33	25.63
Fertilizer, lime, and gypsum	55.85	56.13	48.36	49.28	64.60	66.52	54.82	55.97	58.31	55.45
Chemicals	26.34	26.82	25.66	26.06	30.25	31.34	26.59	27.18	25.09	25.08
Custom operations <sup>1</sup>	9.65	9.76	9.07	9.03	3.84	4.23	8.97	9.10	12.60	12.67
Fuel, lube, and electricity	17.92	21.14	10.51	13.07	13.34	15.38	11.26	13.98	38.55	42.67
Repairs	15.91	17.00	12.70	13.78	19.12	19.53	14.91	15.98	18.63	19.69
Hired labor	8.03	8.37	13.00	13.46	17.87	18.11	6.47	6.77	10.09	10.23
Other variable cash expenses <sup>2</sup>	0.45	0.49	0.00	0.00	0.00	0.00	0.00	0.00	1.84	1.98
Total, variable cash expenses	158.13	163.77	141.86	147.27	169.26	176.07	146.82	152.74	190.44	193.40
General farm overhead	12.46	15.04	6.36	7.63	11.31	14.37	11.55	13.89	16.05	19.21
Taxes and insurance	20.01	22.70	22.14	23.49	13.01	15.84	19.63	21.95	21.96	25.90
Interest	16.73	21.14	2.88	3.65	9.02	10.55	15.26	19.27	24.09	30.42
Total, fixed cash expenses	49.20	58.88	31.38	34.77	33.34	40.76	46.44	55.11	62.10	75.53
Total, cash expenses	207.33	222.65	173.24	182.04	202.60	216.83	193.26	207.85	252.54	268.93
Gross value of production less cash expenses	114.65	166.08	58.61	70.69	104.03	168.46	125.18	162.70	93.82	184.85
Harvest-period price (dollars/bu)	2.78	2.99	3.19	3.06	2.91	3.43	2.74	2.92	2.83	3.07
Yield (bu/planted acre)	115.82	130.01	72.68	82.59	105.37	112.33	116.22	126.90	122.39	147.81

**Table 8-1B—Corn production economic costs and returns, excluding direct government payments, 1995-96**

Item	United States		Northeast		Southeast		North Central		Plains States	
	1995	1996	1995	1996	1995	1996	1995	1996	1995	1996
<i>Dollars per planted acre</i>										
Gross value of production (excluding direct government payments):										
Corn	321.98	388.73	231.85	252.73	306.63	385.29	318.44	370.55	346.36	453.78
Total, gross value of production	321.98	388.73	231.85	252.73	306.63	385.29	318.44	370.55	346.36	453.78
Economic (full ownership) costs:										
Variable cash expenses	158.13	163.77	141.86	147.27	169.26	176.07	146.82	152.74	190.44	193.40
General farm overhead	12.46	15.04	6.36	7.63	11.31	14.37	11.55	13.89	16.05	19.21
Taxes and insurance	20.01	22.70	22.14	23.49	13.01	15.84	19.63	21.95	21.96	25.90
Capital replacement	32.71	34.95	19.16	20.76	29.79	31.07	27.74	29.82	49.12	51.40
Operating capital	4.42	4.17	3.97	3.75	4.73	4.48	4.10	3.89	5.32	4.92
Other nonland capital	13.18	13.35	10.58	10.85	11.73	11.72	11.59	11.82	18.28	18.11
Land	67.28	85.48	25.84	25.88	59.03	74.06	75.26	92.55	51.82	76.03
Unpaid labor	25.23	26.78	31.30	32.69	19.28	21.05	26.24	28.03	22.56	23.75
Total, economic (full ownership) costs	333.42	366.24	261.21	272.32	318.14	348.66	322.93	354.69	375.55	412.72
Residual returns to management and risk	-11.44	22.49	-29.36	-19.59	-11.51	36.63	-4.49	15.86	-29.19	41.06
Harvest-period price (dollars/bu)	2.78	2.99	3.19	3.06	2.91	3.43	2.74	2.92	2.83	3.07
Yield (bu/planted acre)	115.82	130.01	72.68	82.59	105.37	112.33	116.22	126.90	122.39	147.81

<sup>1</sup>Cost of custom operations, technical services, and commercial drying.<sup>2</sup>Cost of purchased irrigation water.

Source: Economic Research Service, U.S. Department of Agriculture.